

Electricity Pricing Event Report – Friday 20 November 2015

Market Outcomes: New South Wales spot price reached \$2,552.20/MWh and \$2,484.74/MWh for trading intervals (TIs) ending 1530 and 1600 hrs respectively. Queensland spot price reached \$2,432.89/MWh and \$2,387.01/MWh for trading intervals (TIs) ending 1530 and 1600 hrs respectively.

Energy and FCAS prices for the other NEM regions were not affected by this event.

Counter price flows caused negative residues of approximately \$422,490 to accumulate on the New South Wales to Victoria directional interconnector between TIs ending 1430 hrs and 1530 hrs. AEMO managed negative residues from 1510 hrs to 1630 hrs (Market Notices 50652 and 50657).

Actual Lack of Reserve Level 1 (LOR1) condition had been declared for the New South Wales region from 1300 hrs to 1710 hrs (Market Notices 50649 and 50658). Actual Lack of Reserve Level 2 (LOR2) condition had also been declared for the New South Wales region from 1530 hrs to 1600 hrs (Market Notices 50654 and 50655).

Detailed Analysis: 5-Minute dispatch price in New South Wales reached the Market Price Cap (MPC) of \$13,800/MWh for DIs ending 1530 hrs and 1550 hrs respectively. 5-Minute dispatch price in Queensland reached \$13,292.80/MWh and \$13,356.40/MWh for DIs ending 1530 hrs and 1550 hrs respectively. The high prices in both regions can be attributed to high demand due to high temperatures, and flow on the VIC-NSW interconnector was constrained towards Victoria to manage a planned outage.

The New South Wales demand was at its yearly peak of 12,802 MW for TI ending 1600 hrs while Queensland reached a peak of 7,588 MW for TI ending 1700 hrs. The maximum temperature was 42.8°C in Sydney and 32.8°C in Brisbane on the day.

With the increasing evening demand in NSW, the N>>N-DTKV_E constraint equation within the N-DTKV_18_15M constraint set began to bind from DI ending 1355 hrs. This constraint equation prevents post-contingent overload of the Canberra – Yass no.9 330 kV line during the planned outage of the Dapto – Kangaroo Valley no.18 330 kV line. This constraint equation also constrained down cheaper priced generation in the southern area of New South Wales.

In New South Wales, between DIs ending 1505 hrs and 1520 hrs, 90MW of generation capacity was withdrawn, which was previously offered at bands priced at less than \$26/MWh. For DI ending 1535 hrs, 657MW of generation capacity from Colongra GT was withdrawn with the reason “AVOID UNECONOMIC START”.

Due to the counter-priced flow on the VIC-NSW interconnector, the negative residue management (NRM) constraint equation NRM_NSW1_VIC1 was activated from DI ending 1515 hrs. The NRM constraint equation violated for DIs ending 1525 hrs and 1530 hrs, and reduced the interconnector flow towards Victoria from 320 MW to 0 MW between DIs ending 1515 hrs and 1540 hrs.

The New South Wales and Queensland 5-minute price reduced to below \$56/MWh for DI ending 1555 hrs after a reduction in demand and in interconnector flow towards Victoria.

The high 30-minute spot prices were not forecast in the pre-dispatch schedules. In pre-dispatch, the forecast demand was lower and more flow towards New South Wales was available on the VIC-NSW interconnector as the outage constraint equation that sets the limit is determined from subregional demand forecast.